

Alcoa Center, PA 15069-0001

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/706,846 11/12/2003 Gregory B. Venema 4430-031234 (03-1257) 6084 12/02/2004 7590 **EXAMINER** Daniel C. Abeles, Esq. MORILLO, JANELL COMBS Eckert Seamans Cherin & Mellott, LLC ART UNIT PAPER NUMBER Alcoa Inc., Alcoa Technical Center 100 Technical Drive 1742

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		pplication No.	A	mu
1			Applicant(s)	
Office Action Summary		10/706,846	VENEMA ET AL.	
Office Action Summary	<b>'</b>	xaminer	Art Unit	
7, 11, 11, 11, 11, 11, 11, 11, 11, 11, 1		anelle Combs-Morillo	1742	
The MAILING DATE of this com Period for Reply	munication appea	rs on the cover sheet with	the correspondence addr	ess
A SHORTENED STATUTORY PERIO THE MAILING DATE OF THIS COMM  - Extensions of time may be available under the provi after SIX (6) MONTHS from the mailing date of this  - If the period for reply specified above is less than th  - If NO period for reply is specified above, the maximu  - Failure to reply within the set or extended period for Any reply received by the Office later than three mo earned patent term adjustment. See 37 CFR 1.704	UNICATION. sions of 37 CFR 1.136(a. communication. rty (30) days, a reply with um statutory period will a reply will, by statute, cau this after the mailing date	). In no event, however, may a repl nin the statutory minimum of thirty ( pply and will expire SIX (6) MONTH se the application to become ABAN	y be timely filed  30) days will be considered timely. IS from the mailing date of this comn	nunication.
Status				
1) Responsive to communication(s	) filed on <u>05 Octo</u>	ber 2004.		
2a) This action is FINAL.		tion is non-final.		
3) Since this application is in condit closed in accordance with the pr				erits is
Disposition of Claims				
4) Claim(s) 1-11 is/are pending in the day of the above claim(s) 9-11 is/sis/sis/are allowed.  5) Claim(s) is/are rejected.  6) Claim(s) 1-8 is/are rejected.  7) Claim(s) is/are objected to research are subject to research.	are withdrawn fro			
Application Papers				
9) The specification is objected to by				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) include				1.4047.15
11) The oath or declaration is objecte	d to by the Exami	ner. Note the attached O	ffice Action or form PTO-	1. 121(a). 152
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a cla a) All b) Some * c) None of 1. Certified copies of the prior 2. Certified copies of the prior 3. Copies of the certified copie application from the Interna * See the attached detailed Office ac	ity documents ha ity documents ha es of the priority d tional Bureau (PC	ve been received. ve been received in Appl ocuments have been rec CT Rule 17.2(a)).	ication No ceived in this National Sta	ge
Attachment(s)				
1) Notice of References Cited (PTO-892)	(DT-0-0-1-1)	4) Interview Sumr		
<ol> <li>Notice of Draftsperson's Patent Drawing Reviews</li> <li>Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date <u>032804</u>.</li> </ol>		Paper No(s)/Ma 5) Notice of Inform 6) Other:	ail Date nal Patent Application (PTO-152	·)

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Heymes et al (US 2004/0182483).

Heymes teaches a process of manufacturing an aluminum alloy heat treatable product (such as 2xxx, 6xxx, 7xxx [0064]) by casting into an ingot, hot rolling into a plate, machining, solution heat treating said machined stock, quenching (see Heymes at claim 1), controlled stretching, and aging (Heymes at claim 2, 10), substantially as presently claimed in instant claims 1-4. Heymes teaches machining into near-net shape (see Examples, Fig. 1). Because Heymes teaches a process of working and heat treating identical to the instant process, it is held that Heymes anticipates the instant invention.

Concerning claim 5, Heymes does not specify any special temper for said flat plate product, and therefore teaches said product is in an as-fabricated temper (F-type temper) after hot rolling.

Concerning claims 6-8, Heymes teaches said process can be used to produce a structural element for a wing skin with integrated stiffeners (see[0067]).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt, Jr et al (US 5, 221,377).

Hunt teaches a heat treatable Al-Zn (7xxx series) alloy product processed by casting into an ingot (column 5 lines 54-56), working (such as rolling column 5 lines 43-44) and optionally machining (column 5 line 60) to achieve the desired shape- such as a plate (column 5 line 45), solution heat treating (column 5 lines 61-63), stretching (column 6 line 9), and aging (column 6 line 13).

Hunt does not specify the order of the steps of working and machining to achieve the desired final shape. However, selection of any order of performing said process steps is prima facie obvious in the absence of new or unexpected results (see MPEP 2144.04), Ex parte Rubin, 128 USPQ 440 (Bd. App. 1959) (Prior art reference disclosing a process of making a laminated sheet wherein a base sheet is first coated with a metallic film and thereafter impregnated with a thermosetting material was held to render prima facie obvious claims directed to a process of making a laminated sheet by reversing the order of the prior art process steps.). See also In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); In re Gibson,

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39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.). Therefore because Hunt teaches a process of producing a heat treatable metal product with substantially the same process steps as presently claimed (and applicant has not shown the specific criticality of step c) removing material after step b) rolling, it is held that Hunt has create a prima facie case of obviousness of the presently claimed invention.

Concerning dependent claims 2-4, as stated above, Hunt teaches said alloy is an aluminum alloy that is categorized as a 7xxx series type (see Hunt at abstract). Hunt also teaches machining to achieve a desired shape (column 5 line 60), substantially as presently claimed.

Concerning dependent claim 5, Hunt does not specify said alloy is in the "F" temper after rolling. Because the instant specification states that the F temper means the temper of the alloy as fabricated (see [0006]), and because Hunt teaches no additional heat treatment or working steps occur, the product taught by Hunt is also in a F temper after rolling.

Concerning dependent claims 6-8, Hunt teaches said steps are suitable for use in a variety of aircraft components, including wing components, wing box components, wing sections, fuselage sections, etc. (column 18 lines 50-53). Therefore the presently claimed skin and stiffening members in the wing panel is held to be within the disclosure of Hunt.

#### Response to Arguments

5. In the response filed on October 5, 2004, applicant submitted various arguments traversing the rejections of record. Applicant's argument that the present invention is allowable over the prior art of record because the instant specification has clearly shown unexpected results with regard to removing material prior to solution heat treating has not been found persuasive

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because said unexpected results are not commensurate in scope with the claimed invention (see MPEP 716.02 d). Whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 1036, 206 USPO 289, 296 (CCPA 1980).

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCM November 29, 2004

GEORGE WYSZÓMERSKI